

Final Report

An Evaluation of the Experimental Low Income Program

Results of Process and Arrearage Effects Evaluations

Prepared for Empire District Electric Co.

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March 29, 2010

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Executive Summary

About This Report

This report presents the results of process and arrearage effects evaluations of Empire Electric's Experimental Low Income Program (ELIP). This program's primary goal is to provide bill payment assistance to Empire Electric's low-income customers who have a reasonably good payment history and who have the ability to pay their electric bill. This evaluation focuses on participants who enrolled in the program between January 2003 and the October 2009.

Summary of Findings

Process Evaluation

1. According to the program managers interviewed, the ELIP is running smoothly with low administrative costs. TecMarket Works agrees with this assessment. Reviews of program operations and internal processes appear to be working in a way consistent with those of other similar sized energy companies offering similar sized programs that have access to limited staff resources.
2. The program's Federal Poverty Level guidelines are not in line with other low-income programs offered through Missouri's CAP agencies, and are keeping low-income customers receiving Social Security Income out of the program's Tier 2 benefits which provide higher bill credits.
3. ELIP is being promoted by CAP agencies out of a desire to help their clients, but need program brochures that explain the program to give to their clients. They also would like to obtain some form of promotion support to help market the program more effectively.

Arrearage Effects Evaluation

1. The CAP agencies are targeting the desired customers for the program. The non-participant group has an average arrearage level of \$12, while ELIP participants carry an average of \$4-\$13 in monthly arrearage, depending on Tier level.
2. The number of days decrease between billing and a customer payment for all ELIP Tiers' participants. Tier 2 participants at the \$50 level decrease their days to pay by an average of nine days.
3. Post ELIP participation customers all take longer to pay their bills than they did before they were participants. Current ELIP participants have the shortest time from billing to payment across all groups.
4. Arrearages levels increase for ELIP participants across all groups after they are no longer participants. However, after participation, their level of debt to the utility increases to a higher level than observed in the pre-participation period.
5. The result of the Low Income Public Purpose Test is 0.22 if the ELIP credit is used as a non-energy benefit to the participant. Removing this participant benefit from the

equation, the test result drops to 0.01. This program, like many most low income programs, is essentially a subsidy to the customers that participate.

Recommendations

TecMarket Works has the following recommendations for the Experimental Low Income Program:

1. Re-structure ELIP's participation guidelines so that customers with income of 135% of the Federal Poverty Level are eligible to participate. This would make ELIP guidelines the same as most other low-income programs offered by the area CAP agencies, and would lessen the need for checking incomes of applicants, expediting the application process.
2. Consider changing the Federal Poverty Level thresholds for Tier 1 and Tier 2 participants. Currently, participants whose sole source of income is from Social Security payments (elderly and disabled) are placed in Tier 1, receiving ELIP credits of \$20 per month instead of the \$50 per month. Making a slight adjustment in the threshold levels will allow those participants that are the target market for the ELIP to receive the full program benefit of \$50 per month in credit.
3. Include ELIP information on the Empire website, and encourage the CAP agencies to include links to the ELIP program on their web sites.
4. Consider adding an educational workshop component that focuses on energy efficient behaviors and measures to the program. Offer the participants higher ELIP credits for successful completion of the workshop to encourage additional savings.
5. Change the income verification from "last 30 days" to "last month's income" to be more in line with other low-income programs and make the processing of applications easier for the partnering CAP agencies by making income verification the same across more low-income programs.
6. TecMarket Works recommends that the CAP agencies be notified of the option for participants to pay more than their Arrearage Payment amount and receive \$1 for every \$2 paid above the monthly deferred payment to an annual maximum of \$60. This information should also be included in program materials and described on the application form so that it can serve as a reminder to the CAP agency staff and participants.

Introduction

This report presents the findings of a process evaluation and arrearage effects evaluation of the Experimental Low-Income Program (ELIP). The study focuses on ELIP participants from program years 2003 through September 2009.

Program Description

The Experimental Low-Income Program is available to qualified low-income customers whose service is billed under Schedule RG, Residential Service. The ELIP provides participants with a fixed credit on their monthly bill (ELIP credit). Customers participating in the ELIP program receive the credit for a period up to 12 months. At the end of the 12-month period, a customer may reapply to continue to participate in the program. This experimental program was approved by the Missouri PSC in Case Nos. ER-2002-0424, ER-2006-0315, and ER-2008-0093.

Service under this rate schedule shall be available to participants in the EDE service area who satisfy the following eligibility requirements:

ENROLLMENT THRESHOLD:

1. Participant must be an Empire District Electric residential customer receiving service under the RG rate.
2. Participant's annual household income must be verified initially, and annually thereafter, as being no greater than 125 percent (125%) of the federal poverty level.
3. For purposes of determining the level of the ELIP credit to be received, the participants will be categorized as follows:
 - Tier 1 – Participants whose annual income has been verified as being from 51 to 125 percent (51% - 125%) of the federal poverty level.
 - Tier 2 – Participants whose annual income has been verified as being from 0 to 50 percent (0% - 50%) of the federal poverty level.
4. Participants shall be required to enroll in EDE's Average Payment Plan (APP) to improve payment performance. Adjustments to the payment amounts can be made once per year.
5. Participants who have outstanding arrearages shall enter special payment agreements through which the arrearages shall be paid over a period of 12 to 24 months. An agreement on the amount to be paid each month is negotiated with the customer and the customer must agree to the payment conditions.

ENERGY ASSISTANCE:

1. Participants who have not previously completed an application for a LIHEAP ("Low-Income Home Energy Assistance Program") grant must agree to apply for a LIHEAP grant when such grants become available. Empire, through the CAP Agencies, assists

ELIP participants with completion of LIHEAP application forms when such assistance is requested.

2. Applicants must also agree to apply for any other available energy assistance programs identified by the Company, including any available weatherization programs.

CREDIT AMOUNT:

Participants shall receive the ELIP credit for so long as the participant continues to meet the ELIP eligibility requirements.

Participants shall receive the ELIP credit in the following amounts (not to exceed the participant's fixed monthly APP payment):

- Tier 1 – Up to a maximum of \$20 per month.
- Tier 2 – Up to a maximum of \$50 per month.

DISCONTINUANCE AND REINSTATEMENT:

Empire may discontinue a participant's ELIP credit for any of the following reasons:

1. If Empire, through the CAP agencies, determines the participant no longer meets the eligibility requirements set forth in the applicable tariff.
2. If the participant submits a written request to Empire asking that the ELIP credit be discontinued.
3. If the participant does not conform to Empire's rules and regulations as approved by the Missouri Public Service Commission, and as a result the participant has Schedule RG service discontinued by Empire.

Evaluation Methodology

This study employed a comparison of the differences in the payment behaviors and arrearage levels between the periods of program participation and non-participation (pre and post) for ELIP participants. The evaluation consisted of three primary activities. These are:

Arrearage Effects Analysis

1. **Sorting and categorization of data and identification of analysis periods.** In this task the data was examined and categorized to support the analysis efforts. Data was examined to confirm continuity across the examination period and data was adjusted as appropriate to eliminate the influence of non-program induced billing and payment effects (meter changes, debt forgiveness, payments by others, dispute adjustments, etc.). Because each customer can have multiple monthly changes to their billing and payment data over the course of the study that directly affect arrearage levels, each participant was treated as an independent case study before the group analysis was be conducted.

2. **Data analysis.** In this step we examined the data to identify payment patterns and arrearage levels for all program participation periods (pre, during, post). We identified:
 - a. the average days between billing and payment,
 - b. the percent of amount due paid (partial-payment, or complete), and
 - c. the average arrearage level to the Empire District Electric Company.
3. **Comparison Group.** This study examined the differences between the pre- and post-ELIP payment periods for ELIP participants and also for a group of similar non-participants. Having a comparison group of similar program-eligible customers allowed us to more accurately measure the changes as a result of ELIP participation rather than changes resulting from national or regional economic conditions not associated with the program. In order to identify a similar group to act as an analysis control group the comparison group consisted of customers who are eligible to participate (due to their enrollment in LIHEAP) but who have not signed up for the program.

Process Evaluation

The process evaluation included a design and operations review that consisted of six on-site management interviews with Empire and CAP agency staff. The interview instrument for the management interviews can be found in Appendix A: Management Interview Protocol.

The management interviews were held on site in Joplin and Springfield, Missouri. During the interviews the interviewee was promised confidentiality in order to help assure an objective data collection and assessment effort.

Evaluation Findings

Process Evaluation

This section presents the results from the in-depth management interviews performed with:

1. Terry Oliver, Director of Customer Service, Empire District Electric
2. Lynda Thompson, Manager of Customer Service Support, Empire District Electric
3. Daryl Esmond, Senior Administrative Assistance - Customer Service Dept, Empire District Electric
4. Cherie Luton, Credit & Collections Coordinator, Empire District Electric
5. Tommie Trammel, Ozarks Area Community Action Corporation (OACAC)
6. Robyn Walker, Economic Security

Program Objectives

The objectives cited by the management interviewees pointed to the following overall objectives:

- To help low-income customers with good payment histories, but who need financial assistance to meet their financial obligations, pay their electric bill.
- To provide qualifying low-income customers with an incentive to pay their utility bill in full before the due date so that they can avoid disconnection and associated fees.

ELIP was started in 2003 as a pilot program. Over this period there have been no changes to the operations of the program or to the programs formal objectives. However, the qualifying Federal Poverty Level guidelines for participation changed slightly in 2006 to allow more customers to participate by increasing the FPL threshold from 100% to 125%.

Program Design

Empire staff stated that they tried to design ELIP to minimize program management and operational labor needs to minimize administrative costs. During the process interviews, program managers all reported that they have succeeded in keeping the program as simple to operate as possible. However, there are a few components of ELIP that could potentially improve the program's operations.

Qualification Guidelines

All of the interviewees were in agreement concerning the need for changes to the income and qualification guidelines, especially in the case of elderly and disabled participants. As the program is currently operating, single income source participants without the ability to work and who are on Social Security income receive approximately \$675 a month (if they are single). These participants are placed into Tier 1 of the program and receive a \$20 ELIP credit. All of the managers TecMarket Works (TMW) interviewed agreed that these participants are the program's primary targets. This group is considered to have little opportunity for increasing their income as household costs increase. While any help they receive is appreciated, the Tier 1 incentive represents a minor portion of their electric costs. The program should consider placing these customers into Tier 2 in which the incentive increases from \$20 a month to \$50 a month.

TMW recommends that the changes outlined below and summarized in Table 1 be considered by Empire Electric.

- The CAP agencies in the area are accustomed to dealing with Federal Poverty Level (FPL) guidelines. Most of the low-income programs they manage have a cap that allows an income of 135% of the FPL for service or program participation. However, ELIP has a cap of 125% of FPL. Increasing the FPL to 135% would allow for consistent operations at the CAP agencies by maintaining consistency with other low-income programs they offer. Setting the income cap at 125% of FPL creates a gap in comparable thresholds that acts to limit program benefits to a group that typically needs these programs to augment their limited income.
- ELIP started with a FPL cap of 100% for Tier 1 participation. This limit was subsequently changed to 125% of FPL while leaving the guidelines for the poorest of the participants (at 0-50% FPL) unchanged. TMW recommends that the Tier 2 guidelines be increased from 0-50% FPL to 0-75% FPL..

Table 1. ELIP Guidelines and Recommended Changes

	Income Guideline	Current Credit	Recommended Changes
Tier 2	0-50% FPL ¹	\$50	0-75% FPL
Tier 1	51-125% FPL	\$20	76-135% FPL, \$25 credit

These changes are recommended for the following reasons:

1. It will increase the credit to those that are living well below the federal poverty level, including those that are elderly or disabled and living on a fixed Social Security income. As the program is currently designed, a single person getting \$674 from a monthly Social Security payment would be placed into Tier 1 and only be eligible for a \$20 monthly ELIP credit.
2. According to program management, at the current rate of participation, only about half of the annual funds available for ELIP credits are being applied to participant bills. These proposed changes to the guidelines for placement into Tier 1 and Tier 2 will help the program to optimize the assistance they are providing to their lowest income customers.
3. Moving the FPL ceiling from 125% to 135% FPL will allow the CAP agencies to streamline their enrollment process such that only one threshold is required for most low income services in the territory.

Table 2. The 2009 Poverty Guidelines for the 48 Contiguous States

Persons in family	Annual Poverty Income Guidelines	Monthly Poverty Income Guidelines
1	\$10,830	\$902.50
2	\$14,570	\$1,214.17
3	\$18,310	\$1,525.83
4	\$22,050	\$1,837.50
5	\$25,790	\$2,149.17

¹ FPL = Federal Poverty Level.

6	\$29,530	\$2,460.83
7	\$33,270	\$2,772.50
8	\$37,010	\$3,084.17
For families with more than 8 persons, add \$3,740 for each additional person.		

Table 3. Proposed Changes to the Income Guidelines for the ELIP Tier Structure

Persons in family	Monthly Poverty Income Guidelines	Current Income Ceiling for Tier 2 ²	Proposed Income Ceiling for Tier 2 ³
1	\$902.50	\$451.25	\$676.88
2	\$1,214.17	\$607.09	\$910.63
3	\$1,525.83	\$762.92	\$1,144.37
4	\$1,837.50	\$918.75	\$1,378.13
5	\$2,149.17	\$1,074.59	\$1,611.88
6	\$2,460.83	\$1,230.42	\$1,845.62
7	\$2,772.50	\$1,386.25	\$2,079.38
8	\$3,084.17	\$1,542.09	\$2,313.13

Verification of Income

Most low-income programs offered through CAP agencies require that the client's income be verified to confirm that they are eligible to receive program benefits. Most programs require the client to verify their income with statements from the previous month. However, instead of using this standard verification approach, ELIP requires income verification for "the last 30 days". This requirement needlessly complicates the verification process. The CAP agency staff report that while this difference does not cause much confusion and that they have learned to deal with it, TMW suggests that the wording for this requirement be changed to reflect that the previous month's income will be used to verify a customer's eligibility for ELIP participation so that the program's requirement is consistent with other low-income verification approaches. This single change allows CAP agencies to verify income requirements once for most of the services they offer and does not change the intent of the verification need.

Program Operations

The ELIP program is operating smoothly according to all interviewed managers. All six of the interviewed managers indicated that they thought the program was running well and that there are no significant problems within Empire Electric associated with the processing of applications or the crediting of accounts.

The program is operated by the CAP agencies and Empire Electric. The CAP agencies (Economic Security and OACAC) enroll participants into the program and assist participants with the application process. The CAP agencies fax the application form to Empire after they have verified that the applicant qualifies for the program.

According to interviewed Empire staff, the CAP agencies quickly submit the applications to Empire, and Empire processes them "immediately". The ELIP participants begin receiving their monthly ELIP credit on their next month's bill. Once the payment is set up on the participant's account, no further action is needed until the participant needs to re-apply after one year and the

² 50% of FPL.

³ 75% of FPL.

process is repeated. The speed of processing is exceptional. In the experience of TecMarket Works, evaluating other low-income program services, this process can take significantly longer than 30 days.

To enroll a participant, Empire staff will log into Empire's billing system and set the system to apply the monthly credits. Any questions, issues, or data gaps pertaining to the customer's application are addressed at this time. This process is effective and efficient. Empire and the CAP agencies report that communication is sufficient to solve issues quickly. There are very few requests for application changes or re-submittals. The lack of significant modification or re-applications suggests that the CAP agencies are successful at helping customers fill out the applications, verifying income information and completing the applications.

The only reported delay in the processing of ELIP credits occurs when a participant moves into an area that has a different billing cycle. When this occurs, the credit system has to be reset to the new cycle. Issues pertaining to notification impact the ability of Empire to adjust the accounting system to match the new cycle. However, this problem is corrected as soon as Empire is informed of the change. In addition, if that move results in a payment not being credited, the credit is applied to the end of the cycle by extending the period of payment by one month. This approach is effective except when that participant is eligible for continued payments into the next period. For these participants, the true-up process may not catch up for years.

Empire tracks program metrics through a monthly report that allows the Empire managers to view the total numbers of participants for the month. This report presents the credits applied, and identifies the associated CAP agency. The report takes about one hour to generate and consumes minimal resources associated with the information technology unit. This also keeps the administrative costs low by limiting administrative time and resources.

If a participant stops making payments or only makes partial payments making arrearage levels increase, the account moves into a collections actions status within Empire. At this time Empire staff will contact the participant and try to make arrangements so that they can continue to participate. The program participation agreement entered into by the participants requiring payment performance are not strictly enforced by Empire, allowing Empire the opportunity to work with the participant to get payments up-to-date before they are dropped from the program. According to Empire's managers participants will have times of increased financial distress that require some level of flexibility by the program. Empire's unofficial goal is to keep participants on the program, working with them to overcome the financial condition and bring the account up-to-date. These conditions necessitate Empire staff have the flexibility to work with each participant's individual conditions to provide the opportunity for them to continue to participate and reduce the need for collection efforts or service disconnects. In the infrequent case of the bill remaining past due an extended period of time, the participant will be notified of a disconnection action and removed from ELIP. According to Empire managers, this condition seldom remains uncorrected, and ELIP participants rarely face disconnection notices.

The process interviews identified only one operational issue that needed to be corrected for some of the program participants. This condition occurred when ELIP's Tier 2 credit changed from \$40 to \$50 in 2006. During this process the change was not effectively communicated within

and across Empire's program accounting and information technology staff. As a result, participants were not credited with the new higher level credit until the following month. However, during that period Empire Electric identified the problem and implemented the solution within a few days so that the \$10 additional credit was applied to the next bill received by the participant.

In this report, TecMarket Works is recommending changes to the income guidelines and credit amounts. Should these recommendations be accepted, TecMarket Works suggests these changes be tested on the participant tracking and accounting systems before going live to minimize glitches in programming that may affect the crediting of accounts.

Program Promotion

The program staff perform outreach activities through multiple venues. The Director of Customer Service at Empire performs outreach through annual bill stuffers and presents information about the program in talks and presentations through various media outlets including radio, news outlets and discussions with reporters when the opportunity is presented. Should additional promotion be needed to effectively use the budget allocated to this program, outreach efforts should be focused on the target groups identified as the primary target groups during the management interviews (seniors on fixed income and disabled / handicapped). These efforts would be implemented in cooperation with social service and senior networks and organizations operating within the program service area.

The program is also presented and described on the Empire web site, though it is noted that many members of the targeted population do not have access to the Internet. However, the information provided on the web site is not listed under the programs offered by Empire in Missouri⁴, and cannot be found on either of the CAP agency websites^{5,6}. TecMarket Works recommends that Empire list the program with the other offered programs, and encourage the CAP agencies to list the program on their web sites as well.

The Program Manager at Economic Security (one of the CAP agencies), promotes the program directly to the clients when they visit or call their office for financial assistance. She also has an assistant that performs outreach duties for ELIP on a weekly basis and she also offers the program to all potentially qualifying clients, particularly focusing on the elderly and disabled clients that approach Economic Security for assistance. The managers at Economic Security feel that ELIP is well-suited for the elderly people that are less likely to let their bill go overdue get a shut off than other segments of the low-income population.

The Manager at OACAC attends energy workshops and seminars and visits senior centers in the area to hand out fliers and materials to promote the program, in addition to promoting the program to clients when they visit the OACAC office in Springfield.

Program Processes

⁴ <https://www.empiredistrict.com/EnergySolutions/Electric.aspx>

⁵ <http://www.escswa.org/servenergy.htm>

⁶ <http://www.oacac-cao.org/oacac/?q=node/12>

The CAP agencies in Empire's territory are the primary promotion and program operations service providers for the ELIP. When clients call or visit the CAP Agency offices looking for financial assistance or other associated services, they are told about the ELIP and if they qualify, and are provided with program information and the application. CAP Agency staff request an Empire bill from the client to verify accounts and eligibility, and help them set up their leveled payment plan (APP) (a requirement for participation). The CAP agency staff will then telephone Empire to determine the APP payment amount for that participant. In cases where there is no usage record due to a recent change of address or other situation, the APP payment is estimated by Empire to reflect the conditions of the participant's status and then adjusted after three months.

During the ELIP application process, the CAP agency client is required to provide evidence that they have an income at a level which will allow them to pay the electric bill. If it is confirmed that the client is on SSI (Supplemental Security Income), the CAP Agencies have the income information they need from the federal payment schedules. If they are not on SSI, applicants may have to bring in income/wages statements to verify income levels. However, in most cases the client has already verified their income with the CAP agency as a result of participating in other CAP agency services that also require income documentation.

The ELIP enrollment applications are filled out on a computer located at the Economic Security office. At the OACAC office clients fill out hard copy forms. During the interviews, TMW asked if it would be preferable to have the same application forms and processes for both CAP offices. However, the managers interviewed all thought that the current system with two applications was working well, and that the different applications (as shown in Appendix B: Program Applications) help Empire staff to easily and quickly determine which office the application is coming from.

After the application is completed and approved by CAP staff (both processes), the agency copies the form and sends it to Empire where the application is approved and used to apply credits and record the participation status of the client.

LIHEAP

According to the program documentation, ELIP participants should also be enrolled in LIHEAP. However, according to the interviewed managers, this is not always the case and there are a few ELIP participants who are not LIHEAP participants. However, most participants are in LIHEAP and are introduced to the ELIP program because of their LIHEAP participation. Empire should determine if they want to enforce the requirement that all ELIP participants are also LIHEAP participants, or modify the participation rules so that an exemption can be provided at the request of the participant.

Underutilized Program Services

According to one interviewee, participants who are carrying an arrearage have the option of receiving extra credits on their bills. If they do pay down the arrearage, Empire will give the participant \$1 for every \$2 paid above the monthly deferred payment to an annual maximum of \$60. If a participant made a payment towards their arrearage of \$20, it is credited as a \$30

payment. However, no participants have taken advantage of this offer and it is not clearly presented in the program materials.

TecMarket Works recommends that the CAP agencies be notified of this payment option so that they are aware of this option and can inform their clients. This information should also be included in program materials and stated on the application so that it can serve as a reminder to the CAP agency staff and the participants that this offer is available to them.

Program Participation

Economic Security indicated that program participation would likely increase if the ELIP credits were higher, especially for those that qualify for Tier 1 which offers only \$20 monthly credits. Potential participants may think that obtaining the monthly credit is not worth the hassle of the participatory paperwork, particularly if they have to provide proof of their income, even though the total annual amount is \$240 resulting from a one-time enrollment process that takes only a few minutes. However, evaluation literature also suggests that seniors are less likely to accept help unless they feel it is necessary. Another barrier to participation is may be that some of the customers may want to let their utility bill rise to high level of arrearage and receive a notice of disconnection. When this occurs, they can often qualify for temporary emergency relief through the Emergency Crisis Intervention Program, which will provide a larger credit to their bill.

Reasons for Low Participation (participation less than the budget allows)

Below is a summary of reasons offered by the interviewed managers about why ELIP is not obtaining the levels of participation they had projected and budgeted during the program’s planning phase.

- Some low-income clients do not want to go on the APP. They don’t want to pay a bill that charges them a higher amount than what the energy they use in any given month. They may not understand that the APP also provides them with smaller bills when they use more energy than average. They may think that this is a economic growth strategy to obtain more income for Empire rather than see this payment approach as a customer service offering.
- Some low-income clients use the CAP agencies and the Emergency Crisis Intervention Program as their personal economic bail-out plan. Customers will visit the CAP agency offices when they are about to be disconnected, and this is a way for them to get more financial assistance. If they have to make a regular payment and be on the APP, it takes this emergency conditions bail-out option away from them.
- Clients do not have to visit the CAP agency to enroll in LIHEAP, and if they don’t come in, they may not be informed of the ELIP, the agencies may not remember to tell them about the program over the phone.

Managers' Recommended Actions and Considerations

The following recommendations and considerations were offered by interviewed managers. TecMarket Works agrees with the recommendations where noted below and provides our recommendations in the summary of this report.

Energy education

Empire cannot require ELIP participants to attend workshops on topics such as energy efficiency or household budgeting. However, TMW and the interviewed managers believe that an educational component can be funded by the program and offered through CAP agencies. The educational component could be fulfilled through LIHEAP as it already has an educational component and funds available for these kinds of workshops for low-income clients. Duke Energy has linked some of their low-income programs to educational workshops and these evaluations have identified greater energy savings from those that receive the education.

To tie the workshops to ELIP, participants could receive an added incentive for attending the workshops. TecMarket Works suggests offering an additional credit to their bills for attendance, such as an extra \$10 a month in credit or a onetime credit of \$50 to \$100 if that cost could be recovered by Empire. This would mean adding Tiers to the program, such as Tier 1+ and Tier 2+ to indicate that the participant has attended the workshop or the processing of a one-time credit.

Energy efficiency education can provide ELIP participants with knowledge about ways to decrease their energy bills, such as washing clothes in cold water, fixing plumbing leaks, and changing their incandescent bulbs to CFLs.

Making usage information more apparent on bills

According to some of the interviewed managers, the Empire bills can be confusing to some of the participants. Current bills show their energy usage, the APP payment and whether it is over or under what they would owe on their past month's usage, is on the back of the bill and often not reviewed by the participants. If this information was presented on the front of the bill, participants may become more aware of their usage and make adjustments in their lives and home to lower their usage.

Expand the program's reach to Empire's service territory in Missouri

The ELIP program is only offered through two CAP agencies (Economic Security and OACAC). There is a large market in and around Branson and in the Ozarks that is not being targeted.

Improve communications with agencies

One of the CAP agencies reports that they would like additional information to promote the program, citing lack of official income guidelines distributed to the agencies and a lack of written program procedures. The CAP agencies reported that they had not received formal notification of the changes in the FPL income guidelines that occurred in 2006, but instead noticed the change on the application forms.

Earmark a portion of ELIP funds for marketing and print program brochures

CAP agency staff would like to have some of the ELIP funds earmarked for marketing the program in Empire's service territory. They also would like for Empire to provide program brochures so that they can be used for marketing and program exposure to their clients and to help support marketing at meetings, workshops and other CAP events.

Change the ELIP credit amount to a percent of the bill

One manager suggested that the program could help the participants more by offering a credit that is a percentage of their APP credit, such as 10 or 20% of the payment. This could be adjusted each year when the APP charges change.

Put the program application online

Some of the Empire staff would like both CAP agencies to complete the enrollment application online so that information would be typed into the forms and submitted on-line or mailed into Empire Electric. The managers noted that hand written forms increase the cost of the program by providing some information that is illegible. This requires additional staff time to correct the information or track down the missing information.

Arrearage Effects Results

This section presents the results from the arrearage effects analysis. This analysis was performed on billing and payment data for 2,307 low-income customers starting as early as 1999 and going through the closing of the account or until September, 2009 if the account remained active. The 1,175 non-participants are a matched comparison group as they are recipients of LIHEAP payments but are not ELIP participants. There were a total of 1,137 ELIP participants in the participant groups.

Days to Pay

The number of days to pay a bill is a component of payment effects. If customers make their payments sooner, it will generally follow that they will have fewer late payments and late fees. This analysis only includes payments made by the customer, therefore no LIHEAP, ELIP, or other assistance payments are included in this analysis. Table 4 below presents a summary of the "days to pay" data analysis, with figures below.

Table 4. Summary of Days to Pay Results

Group	Mean Percent of Customers Making at Least One Payment of Any Amount on a Bill	Mean Number of Days to Pay Bill	Mean Minimum Days to Pay Bill	Mean Maximum Days to Pay Bill
Non-Participants	77.63%	45.54	43.14	48.06
Pre-ELIP, Tier 1	85.75%	31.19	29.84	32.57
Current ELIP, Tier 1	74.67%	28.50	27.38	29.61
Post-ELIP, Tier 1	72.00%	45.54	33.69	48.05
Pre-ELIP, Tier 2, \$40	81.40%	44.32	41.90	46.78
Current ELIP, Tier 2, \$40	61.05%	41.15	39.43	43.09
Post-ELIP, Tier 2, \$40	70.07%	49.58	46.34	52.95
Pre-ELIP, Tier 2, \$50	75.18%	43.12	39.85	46.32
Current ELIP, Tier 2, \$50	50.92%	34.28	33.38	35.26
Post-ELIP, Tier 2, \$50	53.33%	45.72	44.06	47.55

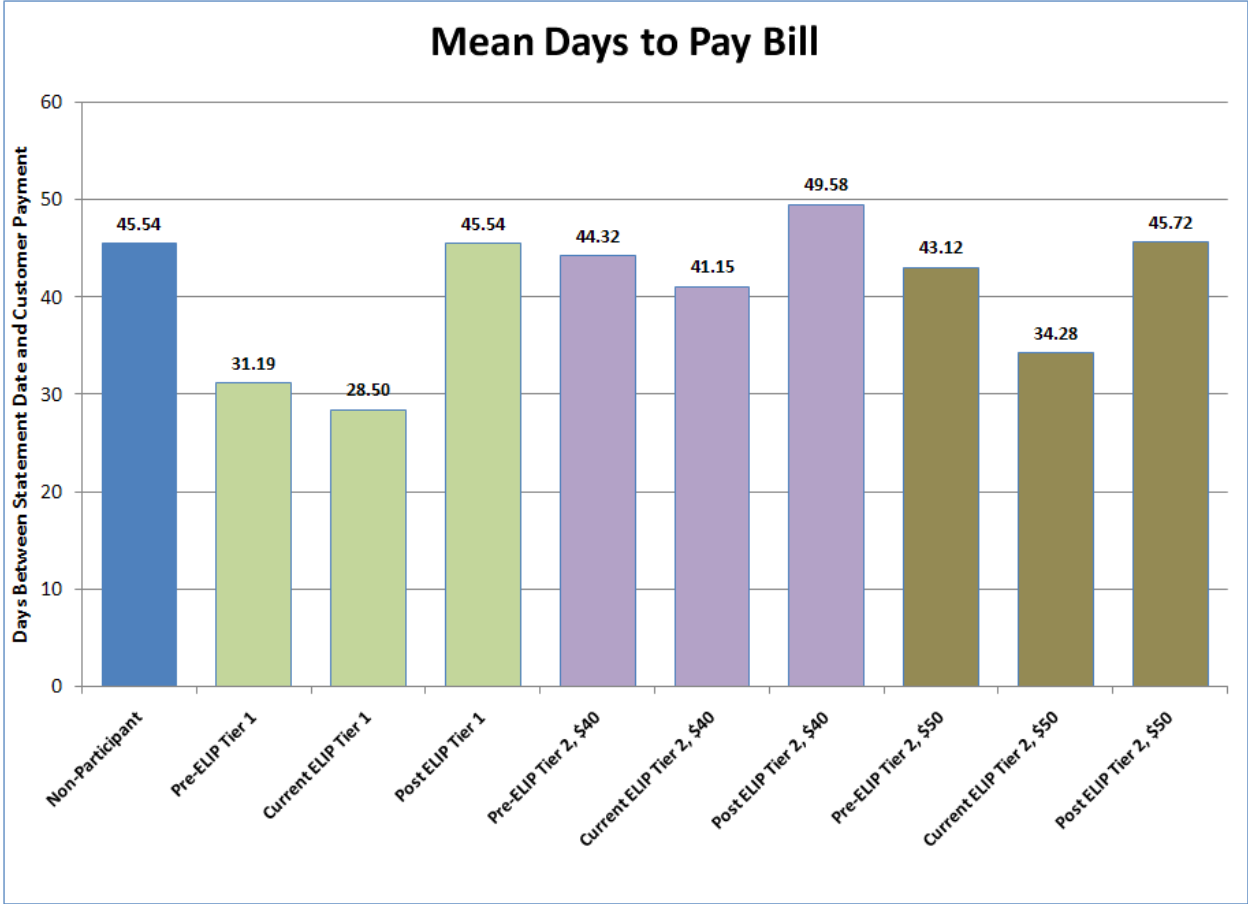


Figure 1. Mean Days to Pay Bill, By ELIP Tier and Participation Status

All groups improved their payment performance during the participation periods. The non-participant comparison group takes an average of 46 days to pay their bill. Before ELIP Tier 1 participants enrolled in ELIP, they made the timeliest payments with an average of 31 days. Tier 2 participants (both at the \$40 and \$50 level) which are at lower income levels, were slower to make payments. All ELIP Tier participants, on average, were able to pay their bills sooner, as can be seen in "Current" bars in Figure 1 above. It is interesting to note that all Tier groups show an increase in the days to pay their bills after they are no longer enrolled in the program.

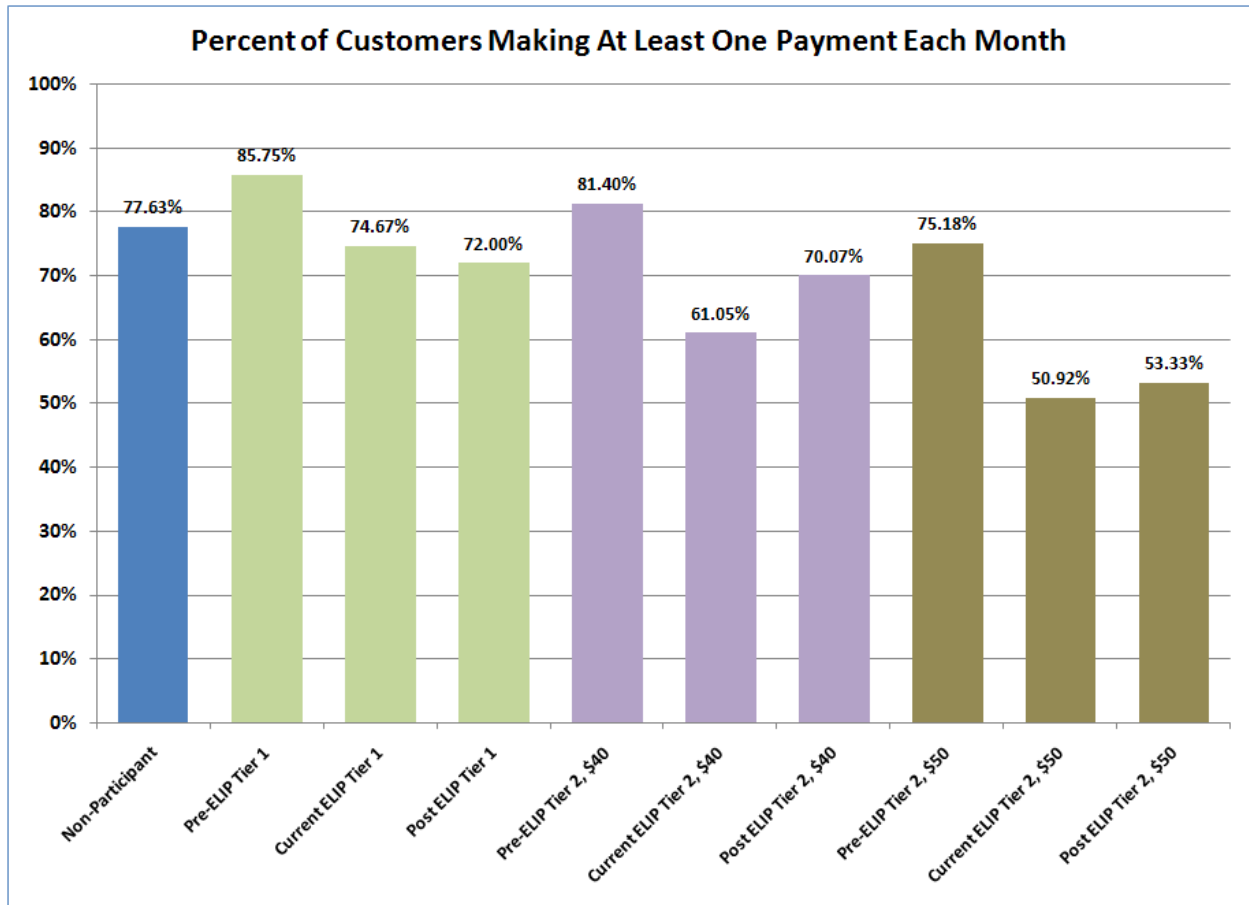


Figure 2. Percent of Customers Making a Payment, By ELIP Tier and Participation Status

Figure 2 above shows the percentage of customers that make at least one payment on their bill in a month. For instance, non-participants will make a payment towards their utility bill in 77.63% of the months covered in the analysis. For all participation statuses, it is interesting to note that the lower the income level (indicated by higher Tier levels), the lower number of percent of that group making a payment in any month. While ELIP participants are current enrollees of the program, their payments drop, which may be an indicator of the ELIP payment covering all or a large portion of their utility bill, and so they skip making a payment on some months. After ELIP enrollment, the percent of months with a customer payment increases again, but still drops as income levels drop.

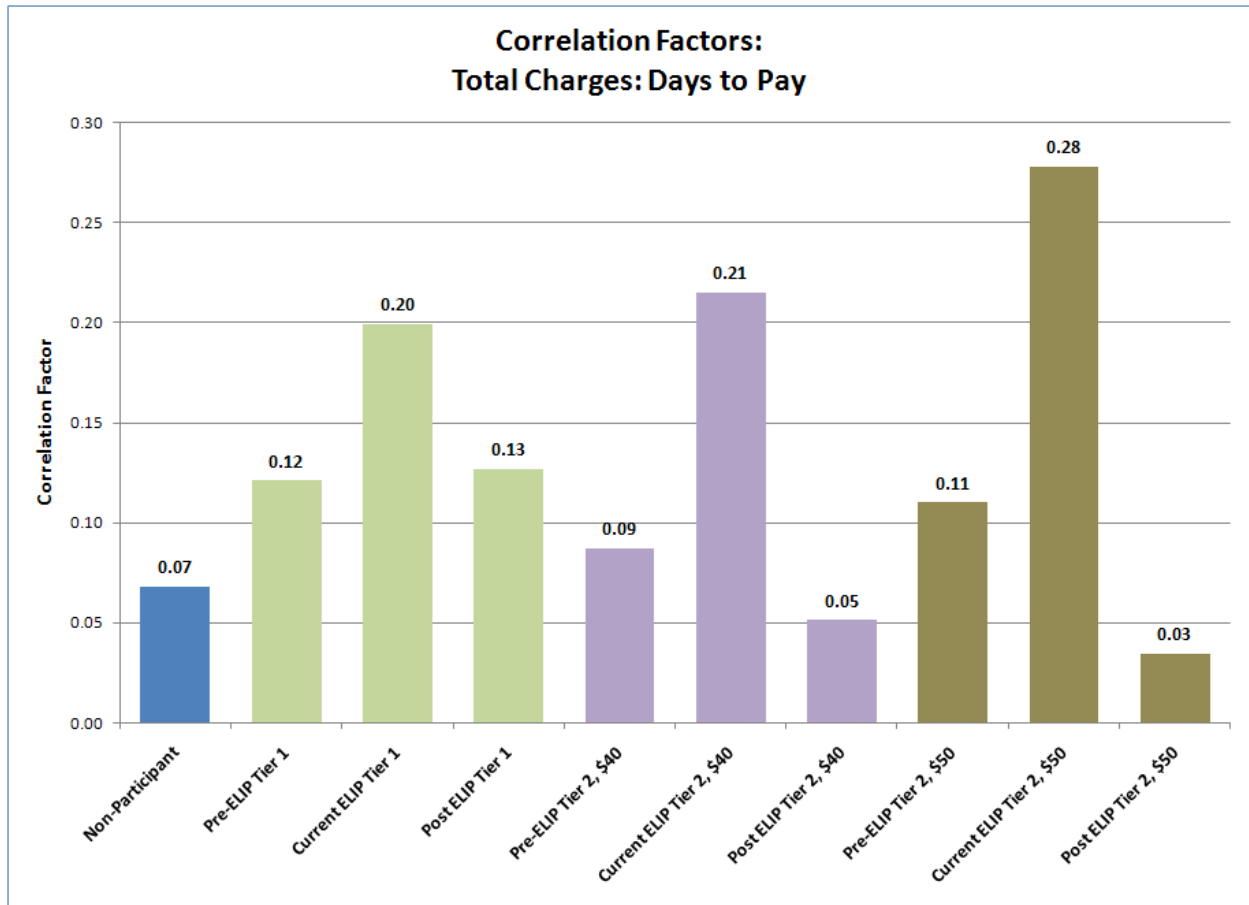


Figure 3. Correlations Between Total Charges and Days to Pay (Higher Charges leading to More Days Until a Customer Payment is Made)

Figure 3 above shows the correlation factors between the total charges in a month and the days to pay the bill. TMW looked into this to see if larger bills meant that it would take longer for the customers to pay their bill. While the correlation factors are low, it is interesting to note that current ELIP participants will tend to take more time in paying their bill if it is a larger amount.

Percent of Total Bill Paid

This analysis includes all payments made to the customers' bills. Therefore, all LIHEAP, ELIP, and other assistance payments are included in this analysis. TMW looked at the total bill charges compared to the total payments made from all sources.

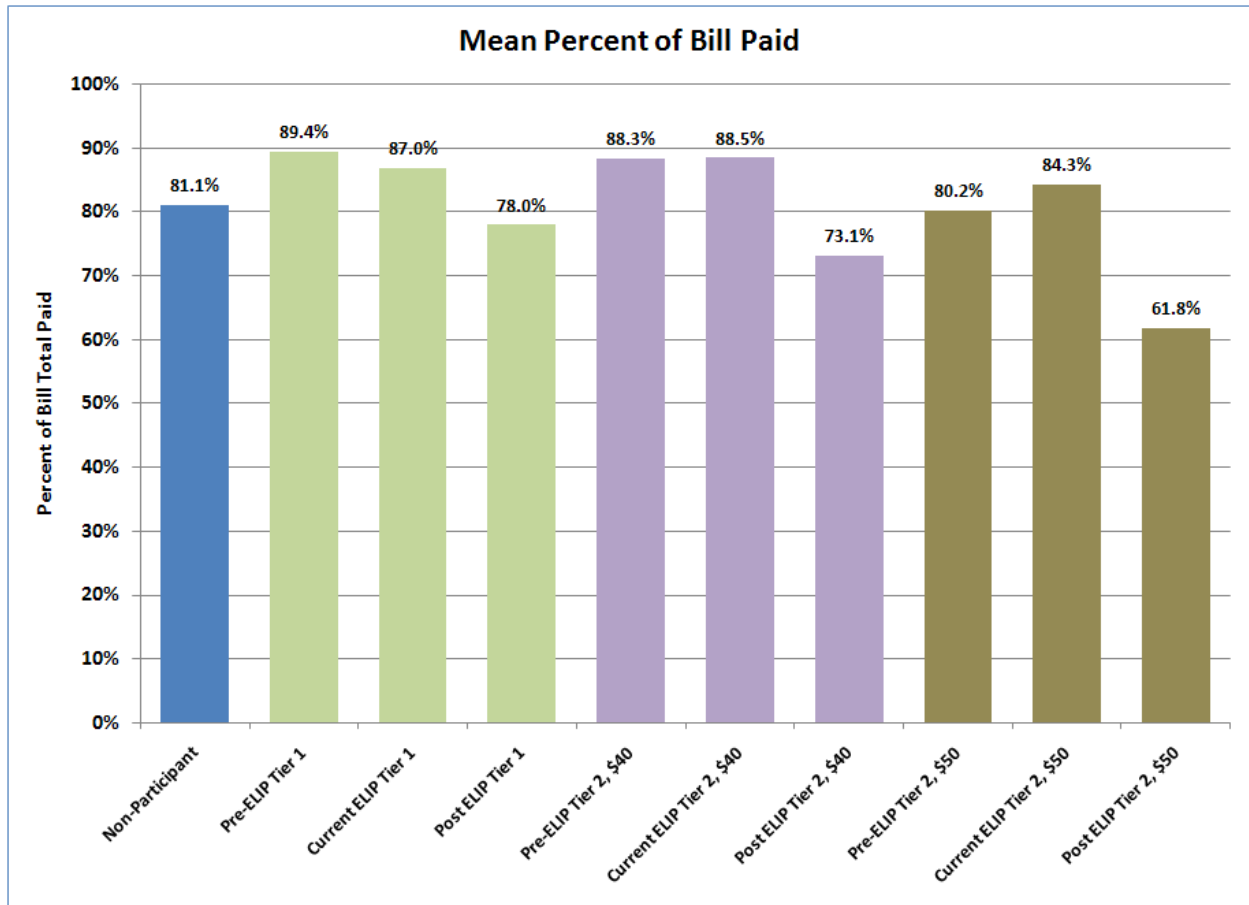


Figure 4. Mean Percent of Bill Paid Each Month, by ELIP Tier and Participation Status

Figure 4 above presents the mean percent of the total bill paid each month across all months of data. Generally, about 80% of the bill is paid each month by non-participants. Tier 1 participants have the best payment behavior with almost 90% of the bill paid each month. After their enrollment in ELIP is over, the percentage drops to 78%. All Tiers have this pattern, when they are no longer enrolled in ELIP, they percent of the bill paid drops. Tier 2 participants have the highest percentage increase from pre-participation to current participation. Tier 2 participants are getting help in paying their bill through the ELIP program. Tier 1 participants, however, actually pay less of their bill after they enroll in ELIP.

Figure 5 below shows the average percent of bill paid by quarter for non-participants (bars) and Tier 1 and Tier 2 participants (\$50 level) while they are participants and after their participation (lines). The graph shows that the general trends are the same, but ELIP participants seem to pay a higher percent of their bills when they are receiving ELIP credits that help them pay their bill.

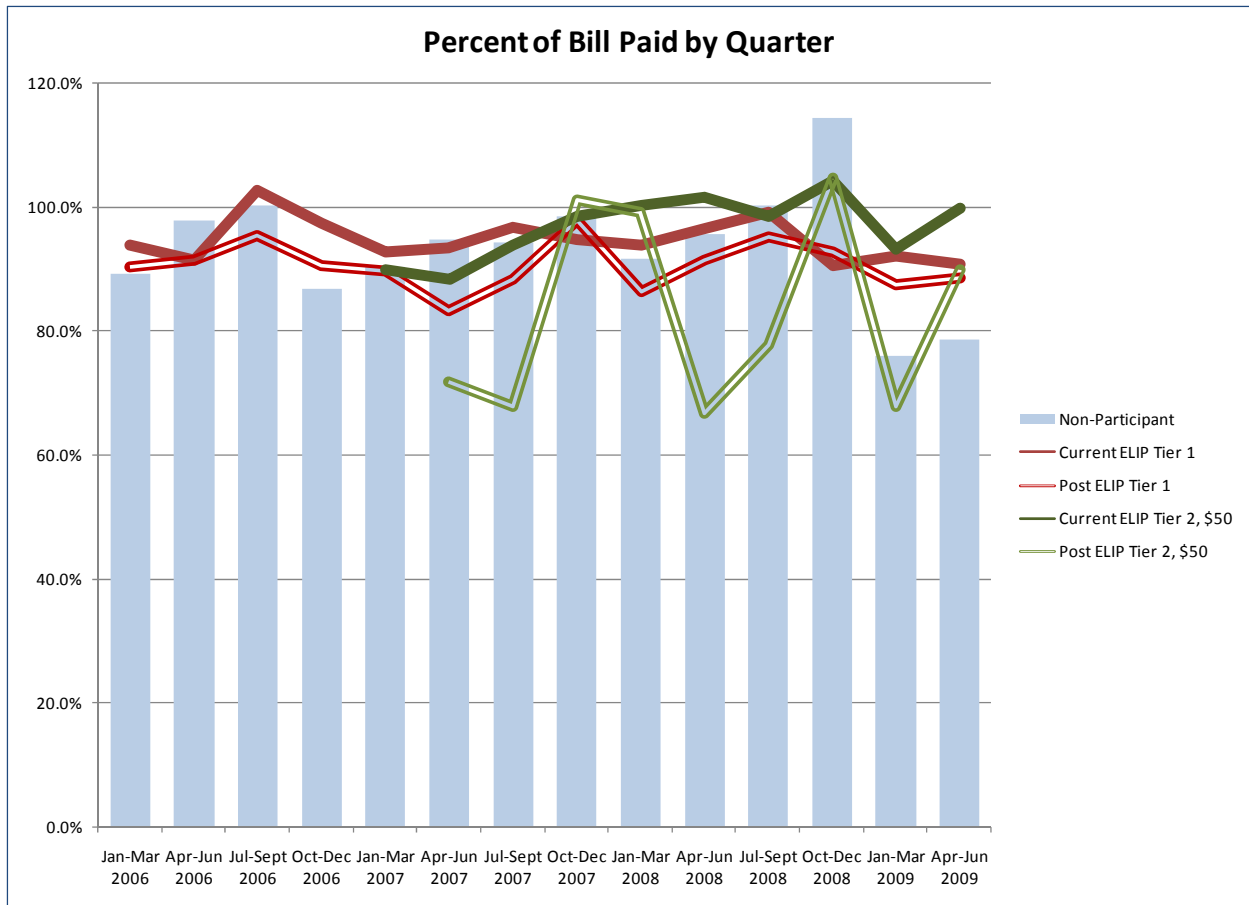


Figure 5. Percent of Bill Paid, by Quarter

Arrearage

This analysis only includes the amount of debt of all the customers leftover after all payments.

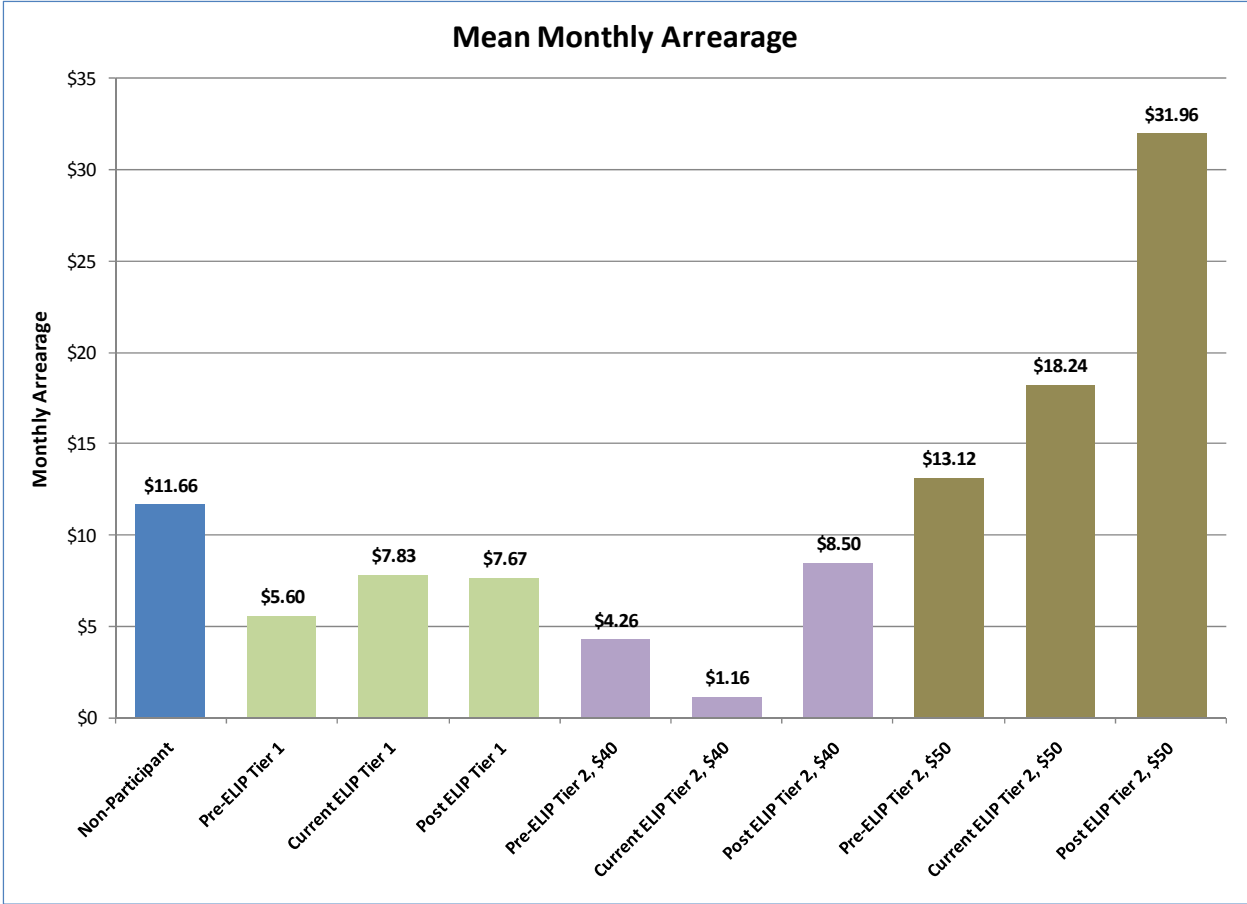


Figure 6. Mean Monthly Arrearage, By ELIP Tier and Participation Status

Non-participants have the highest average arrearage of all groups before they participated in ELIP, with an average arrearage of \$12 a month over all months. ELIP participants start off with a lower level of arrearage, and then the levels of arrearage during participation are unpredictable, with some groups increasing their arrearage (Tier 1 and Tier 2 at \$50 level). However, all groups, on average, increase their debt level after they are no longer enrolled in ELIP.

Bankruptcy and Write-offs

ELIP participants have a lower occurrence of bankruptcy claims than the non-participant comparison group, though by a small amount (0.77% for non-participants, and 0.53% for participants). The percent of customers with debt write-off is much higher. Almost thirty percent (28%) of ELIP participants have had debt write-offs at some point in their payment history (before, during, or after ELIP participation), and only 19% of the non-participating comparison group had this occur at some point in their payment data.

	Number of Customers Filing Bankruptcy Claims	Number of Customers with Debt Write-offs	Total Population in Group	Percent of Customers Filing Bankruptcy Claims	Percent of Customers with Debt Write-offs

Non-Participants	9	220	1175	0.77%	18.7%
ELIP Participants	6	318	1137	0.53%	28.0%

Participant Enrollment and Breaks in ELIP Participation

During the categorization process, TMW encountered participants that had breaks in their participation status. Upon further review, these breaks were one month in length for all but few cases. Table 5 presents a summary of the breaks in participation for ELIP participants by Tier. If a participant changed Tiers, they are not included in either “Tier 1” or “Tier 2”.

Table 5. Summary of Breaks in Participation

Tier	Count	Number of Breaks	Percent with Breaks
Tier 1	777	126	16.2%
Tier 2	358	37	10.3%

We also looked at the first month of enrollment, which is presented in Figure 7 below. The highest levels of enrollment occurred shortly after the program began in 2003, with steady enrollment occurring since that time.

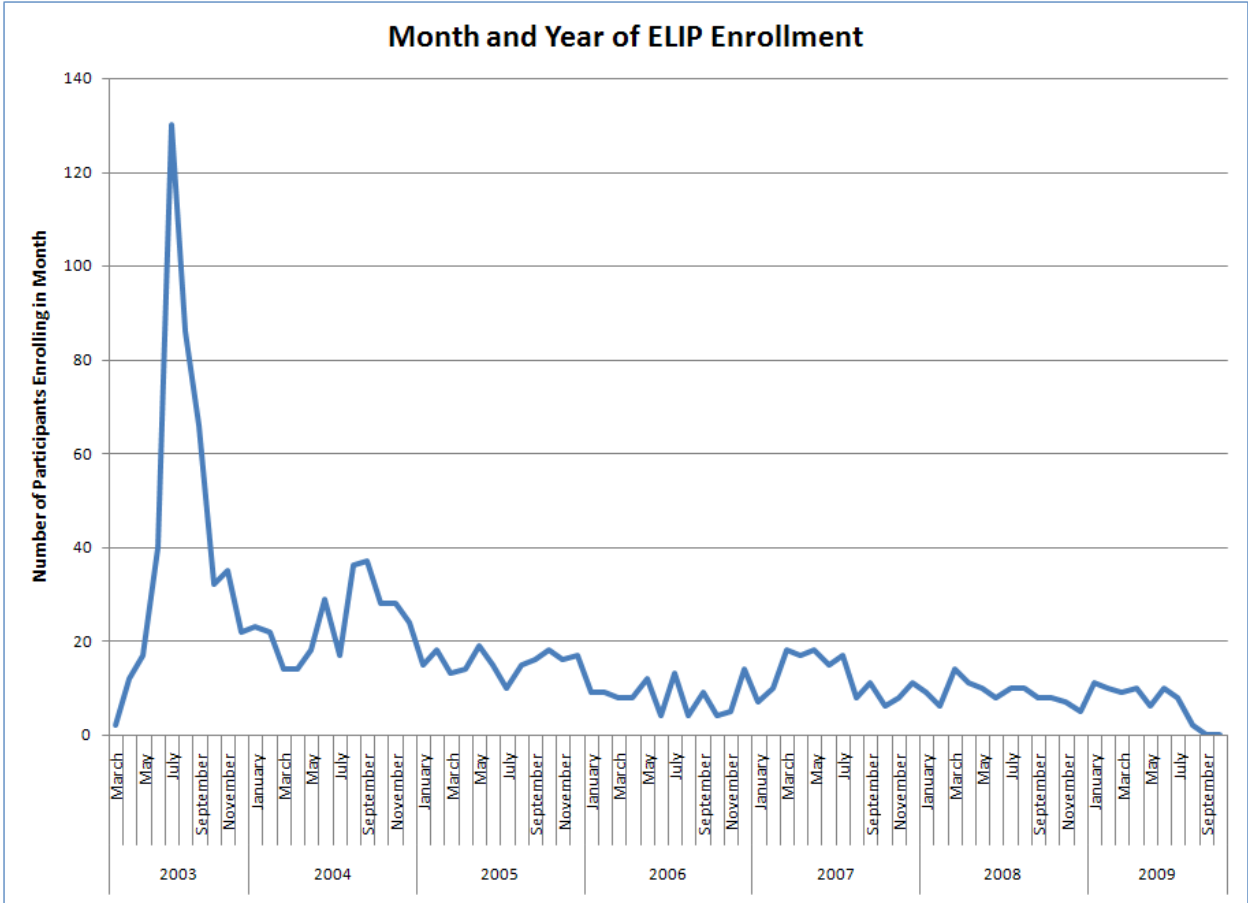


Figure 7. Month and Year of Enrollment (First ELIP Payment)

Low Income Public Purpose Test

The Low Income Public Purpose Test (LIPPT) model includes calculations for estimating the energy benefits and costs of a low income program, as well as the benefits associated with a wide range of non-energy benefits (NEBs) that can be attributed to a low income program.

The following values were used in the test:

- Number of participants: 1,137
- Real discount rate: 5%
- Inflation rate: 3%
- Indirect costs (ELIP credits for July 2008 – August 2009): \$55,110
- Administration: \$6,365
- Evaluation: \$8,751 (cost distributed over six years)

The non-energy benefits (NEBs) valued are averages based on the literature review performed during the development of the LIPPT:

- Utility Benefits:
 - Fewer shutoffs: \$27
 - Fewer reconnects: \$11
 - Fewer notices: \$570
- Participant Benefits are averages based on the literature review performed during the development of the LIPPT, with the exception of the ELIP credits:
 - Fewer shutoffs: \$188
 - Fewer Calls to the utility: \$74
 - Fewer reconnects: \$45
 - ELIP credits: \$14,185

Public Purpose Test Results

The results of the Low Income Public Purpose Test will vary depending on the input values and the length of time that NEBs are considered to be in effect. Past studies of low-income programs have indicated that NEBs will no longer exist after 3-6 months. For this study we used 3 months since this is a direct credit program that does not provide participants with services or measures that would decrease their energy consumption. When they are no longer a participant, they are no longer receiving any benefits from the program. With this scenario, the result of the test is 0.22.

A benefit cost ratio of less than one (0.22) indicates that this program cannot be considered cost effective from the perspective of the utility and the ratepayer.

This value counts the dollar amount of the monthly credit as a NEB to the participant, as that credit allows them to use their own money in other ways, which is a benefit to the participant. The amount is lower than the \$55,110 above since the NEBs are counted for only 3 months. With this NEB removed, the test result is 0.01.

Appendix A: Management Interview Protocol

Name: _____

Title: _____

Position description and general responsibilities:

We are conducting this interview to obtain your opinions about and experiences with the Empire Experimental Low-Income Program (ELIP). We’ll talk about the ELIP Program and its objectives, your thoughts on improving the program, and its participation rates and outcomes. The interview will take about an hour to complete. May we begin?

Program Objectives

1. In your own words, please describe the ELIP Program’s objectives.
2. In your opinion, which objectives do you think are being met or will be met? How do you think the program’s objectives have changed over time?
3. Are there any program objectives that are not being addressed or that you think should have more attention focused on them? If yes, which ones? How should these objectives be addressed? What should be changed? Do you think these changes will increase program participation?
4. Should the program objectives be changed in any way because of market conditions, other external or internal program influences, or any other conditions that have developed since the program objectives were devised? What changes would you put into place, and how would it affect the objectives?
5. Do you think the limits on participation are appropriate? “The program will not be limited to fewer than 200 participants from Group A and 200 participants from group B.”

Program Operations, Outreach and Incentives

6. Do you think the application process for ELIP program participation is easy to understand and complete?
7. Do you think the incentives offered through the program are large enough to entice the low-income customers to participate? Why or why not?

8. Do you think the incentives are helping the participants? Do you think that the incentive and the two group structures are working as planned?
9. Applicants agree to apply for any other available energy assistance programs identified by the Company, including any available weatherization programs and LIHEAP grants – do you think that participants are following through with this? Is there any follow-up with participants from Empire or other agencies?
10. What kinds of marketing, outreach and customer contact approaches do you use to make your customers aware of the program and its options? Are there any changes to the program marketing that you think would increase participation?
11. What screening tests were used to make sure the right customers were enrolled in the ELIP program? Please explain how the screening process worked. Walk through some different examples of how this worked. In your opinion, how well did this work? Why? Are any changes needed to the screening process?
12. Do you agree with the eligibility requirements that are in place for ELIP?
13. What are the main reasons customers have for not wanting to participate?
14. What percent actually enroll once they apply and are screened?
15. How do you inform allies and community agencies serving the low-income community about the program? How effective has this been in getting participation from the right customers?
16. Have there been any cases where the customer applying felt that they qualified but was turned down? Are the guidelines for participation clear to everyone involved? Did anyone refuse to participate? Why did some of the ELIP-eligible customers not take advantage of the program?
17. Are there any changes to the incentives or marketing that could possibly increase participation in the program?
18. What complaints or customer issues did you experience in ELIP? How were these handled?
19. What can be done to help solve (complaint 1 / complaint 2 / complaint 3 / etc.)?
20. I would like you to tell me about the customer's experiences with the program. What kinds of things did they like, what kinds of things did they dislike, and how do you think they feel about the program overall?

21. Do you think there are any energy savings from this program? Do you think that the participants are aware of energy efficiency behaviors and cost-effective measures that will lower their energy bill?
22. Do you think the program should include some energy efficiency training or literature, or remain a financial assistance program as it stands?

Overall ELIP Management

23. Describe the use of any advisors, technical groups or organizations that have in the past or are currently helping you think through the program's approach or methods. How often do you use these resources? What do you use them for?
24. How are the ELIP credits being applied? What is the system that is currently being used to credit accounts and how well is it working?
25. Were there any participant tracking, accounting or processing problems, or issues associated with tracking and delivering incentives? What were they and how can these be avoided in the future?
26. Overall, what about the ELIP Program works well and why?
27. What doesn't work well and why? Do you think this discourages participation?
28. Can you identify any operational barriers that impede a more efficient program operation?
29. If you had a magic wand and could change any part of the program what would you change and why?
30. What market information, research or market assessments are you using to determine the best target markets or market segments to focus on?
31. What market information, research or market assessments are you using to identify market barriers, and develop more effective delivery mechanisms?
32. How do you manage and monitor or evaluate contractor involvement or performance? What is the quality control and tracking process? What do you do if contractor performance is exemplary or below expectations?
33. When you look at the help provided to participants by the program, and weigh the program costs and operational challenges; what would you say are the different types of benefits the participants receive from the program?
34. Do you think the cost and efforts associated with the ELIP Program justify the results achieved? Why do you say this?

35. Lastly, I would like to ask your opinion about program accomplishments that can be improved upon in future programs and about other added accomplishments that you think should be built into future programs. What are the kinds of things that you think program management should consider, or things that can be accomplished in a future version of this program?

Appendix B: Program Applications

The following images are copies of the two ELIP applications being used by the CAP agencies in Empire's district.

Rec'd

Mar. 19. 2010 10:38AM THOACAC OZARK DISTRICT ELECTRIC COMPANY No. 3468 P. 2

Experimental Low Income Program

Agency Ozarks Area Community Action Corporation		County			Date of Application	
HOUSEHOLD INFORMATION				Handi- capped	Age	Race/ Ethnicity
HOH Last Name		First	MI	Social Security Number		Gross Monthly Income
1. HOH Last Name		First	MI			\$
2. Spouse's Last Name						\$
3.						\$
4.						\$
5.						\$
6.						\$
7.						\$
8.						\$
ARE ALL HOUSEHOLD MEMBERS U.S. CITIZENS? Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>				Telephone		TOTAL MO INCOME \$
ADDRESS (STREET, CITY, STATE, ZIP CODE)				Do You Rent or Own? Rent <input type="checkbox"/> Own <input type="checkbox"/>		% of Poverty < 50% <input type="checkbox"/> 51-100% <input type="checkbox"/>
Emergency Contact (Name)		Address		City, ST, Zip		Telephone
BRIEFLY EXPLAIN WHY EMERGENCY FUNDS ARE NEEDED FOR THIS HOUSEHOLD						
OTHER ASSISTANCE/SOURCE						
<input type="checkbox"/>	ECIP	<input type="checkbox"/>	HUD Section VIII	<input type="checkbox"/>	Crosslines	<input type="checkbox"/>
<input type="checkbox"/>	FEMA	<input type="checkbox"/>	LIHEAP	<input type="checkbox"/>	MHTF	<input type="checkbox"/>
<input type="checkbox"/>	United Way	<input type="checkbox"/>	Salvation Army	<input type="checkbox"/>	Project Help	<input type="checkbox"/>
<input type="checkbox"/>		<input type="checkbox"/>		<input type="checkbox"/>		<input type="checkbox"/>
TYPE OF PRIMARY HEAT SOURCE						
<input checked="" type="checkbox"/>	Electric	<input type="checkbox"/>	Gas	<input type="checkbox"/>	Propane	<input type="checkbox"/>
I hereby authorize the above agency, my Energy Supplier, any related agency, their agents and employees to receive or provide information for the purpose of completing this application and release the foregoing from any liability. I certify that the information given on this application is true and accurate to the best of my knowledge. I further realize that providing false or fraudulent information will result in the rejection of this application and prosecution under the laws of the state of Missouri.						
Applicant's Signature		Date	Interviewer's Signature		Date	Supervisor's Signature
EMPIRE DISTRICT ONLY:						
Approved	Y or N	Amount	\$20 or \$40	Effective Date	mm/dd/yyyy	Charge #
Tokens		Letter Sent		Y or N		
Empire Representative's Signature		Date	Date of Payment	Check No.	Payment Amount	

Income Sources:
 W Wages VA Veterans Administration A Alimony SEI Self Employment
 SS Social Security R Retirement-Public/Private TANF TANF O Other Income
 SSI Supplemental Social Security CS Child Support W Welfare



THE EMPIRE DISTRICT ELECTRIC COMPANY

Experimental Low Income Program

Agency Name Economic Security Corp					County Jasper	Application Date
---------------------------------------	--	--	--	--	------------------	------------------

Applicant Information

Last Name	First Name	MI	Handicap	Age	Race/Ethnicity	Social Security	Gr Mon Income	Income Source
			<input type="checkbox"/>	0			\$0.00	

Applicant's Spouse Information

Last Name	First Name	MI	Handicap	Age	Race/Ethnicity	Social Security	Gr Mon Income	Income Source
			<input type="checkbox"/>	0			\$0.00	

Applicant's Dependant Information

Last Name	First Name	MI	Handicap	Age	Race/Ethnicity	Social Security	Gr Mon Income	Income Source
			<input type="checkbox"/>	0			\$0.00	
			<input type="checkbox"/>	0			\$0.00	
			<input type="checkbox"/>	0			\$0.00	
			<input type="checkbox"/>	0			\$0.00	
			<input type="checkbox"/>	0			\$0.00	

Ages 0-5	Ages 6-17	Ages 18-64	Ages 65-74	Ages 75+	Total HH Members	All US Citizens?	Total Disabled Members	Phone Number
0	0	0	0	0	0	<input type="checkbox"/>	0	

Address	City	State	ZIP Code	Rent or Own?	% Of Poverty:	Total Gross Monthly Income
						\$0.00

Emergency Contact Information

Emrg Contact Name	Emrg Contact Address	Emrg Contact City	Emrg Contact State	Emrg Contact ZIP	Emrg Contact Phone

Reason Funds are Needed for Household

Other Assistance/Source

ECIP	FEMA	UnitedWay	HUDSectionVIII	LIHEAP	SalvationArmy	Crosslines	MHTF	ProjectHelp	DOLLARHELP
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Other Assistance Source 1			Other Assistance Source 2			PrimaryHeatSource			

I hereby authorize the above agency, my Energy Supplier, any related agency, their agents and employees to receive or provide information for the purpose of completing this application and release the foregoing from any liability. I certify that the information given on this application is true and accurate to the best of my knowledge. I further realize that providing false or fraudulent information will result in the rejection of this application and prosecution under the laws of the state of Missouri.

Applicant's Signature	Date	Interviewer's Signature	Date	Supervisor's Signature	Date

EMPIRE OFFICE USE ONLY:

Approved _____	Amount _____	Effective Date _____	Charge # _____	
Tokens _____		Letter Sent _____		
Empire Representative Signature	Date	Date of Payment	Check No.	Payment Amount